

Claims

What is claimed is:

Claim 1

1. A method for determining, in a trader device of an electronic trading system, whether a match exists between a client requirement, provided by a client device of the system, and a supplier offer stored in said trader device, the supplier offer comprising feature data, indicative of a set of features of an offered product, including at least one updatable feature data element which is indicative of a variable feature of the offered product and includes address data indicative of a location from which a current specification of the variable feature can be obtained by the trader device in response to an update request from the trader device, the method comprising:
 - a) receiving from the client device a client requirement comprising constraint data, indicative of a set of required product features, and at least one updatable feature data element, indicative of a variable required product feature, which includes address data indicative of a location from which a current specification of the variable feature can be obtained by the trader device in response to an update request from the trader device;
 - b) comparing the constraint data and the feature data;

(a)

- c) repeatedly issuing update requests to obtain current specifications for said updatable feature data elements of the supplier offer and the client requirement and determining whether a negotiation success condition, dependent on said current specifications, is satisfied, until said negotiation success condition or a negotiation 5 termination condition is satisfied; and
- d) determining that a match exists between the client requirement and the supplier offer if said feature data corresponds to said constraint data and said negotiation success condition is satisfied.

2. A method according to claim 1 wherein the supplier offer includes constraint 10 data, indicative of a set of required client features, and the client requirement includes feature data, indicative of a set of offered client features, and wherein:

- step (b) comprises comparing the constraint data of the client requirement with the feature data of the supplier offer and comparing the constraint data of the supplier offer with the feature data of the client requirement; and
- 15 in step (d), it is determined that a match exists if said negotiation success condition is satisfied and the feature data of the supplier offer and client requirement corresponds to the constraint data of the client requirement and supplier offer respectively.

3. A method according to claim 1 wherein said negotiation success condition is defined by said constraint data.

4. A method according to claim 1 wherein said negotiation success and termination conditions are predetermined in the trader device.

5 5. A method according to claim 1 including performing step (b) prior to performing step (c).

6. A method according to claim 1 wherein, when issuing a said update request for at least a second and subsequent current specification for said updatable feature data element of one of the supplier offer and client requirement, the most recent current specification for said updatable feature data element of the other of the supplier offer and client requirement is included in the update request.

10 7. A method according to claim 1 wherein step (c) comprises issuing respective update requests to obtain current specifications for said updatable feature data elements of the supplier offer and client requirement, determining whether said negotiation success condition is satisfied, and if not:

(c1) issuing a said update request to obtain a new current specification of said at least one updatable feature data element of one of the supplier offer and client requirement, determining whether the negotiation success condition is satisfied, and if not:

(c2) issuing a said update request to obtain a new current specification of said at least one updatable feature data element of the other of supplier offer and client requirement, determining whether the negotiation success condition is satisfied, and if not:

(c3) repeating steps (c1) and (c2) until one of the negotiation success condition and the negotiation termination condition is satisfied.

8. A method according to claim 1 wherein at least one of the supplier offer and client requirement includes a plurality of said updatable feature data elements, and the negotiation success condition is dependent on the current specifications for a subset of the updatable feature data elements of the supplier offer and client requirement, and wherein step (c) is performed only for the updatable feature data elements of said subset.

9. A method according to claim 1 including, if it is determined in step (d) that a match exists between the supplier offer and the client requirement, transmitting data indicative of the supplier offer to the client device.

10. A trader device of an electronic trading system for determining whether a match exists between a client requirement, provided by a client device of the system, and a supplier offer stored in the trader device, the supplier offer comprising feature data, indicative of a set of features of an offered product, including at least one updatable
5 feature data element which is indicative of a variable feature of the offered product and includes address data indicative of a location from which a current specification of the variable feature can be obtained by the trader device in response to an update request from the trader device, the trader device comprising memory for storing the supplier offer, communication means for transmission and reception of data by the trader device, and
10 control logic, responsive to receipt by the trader device of a client requirement which comprises constraint data, indicative of a set of required product features, and at least one updatable feature data element, indicative of a variable required product feature, which includes address data indicative of a location from which a current specification of the variable feature can be obtained by the trader device in response to an update request from
15 the trader device, to:

compare said constraint data and said feature data; and
repeatedly issue update requests via said communication means to obtain current specifications for said updatable feature data elements of the supplier offer and the client

requirement and determine whether a negotiation success condition, dependent on said current specifications, is satisfied, until said negotiation success condition or a negotiation termination condition is satisfied;

wherein the control logic is configured to determine that a match exists between

- 5 the client requirement and the supplier offer if said feature data corresponds to said constraint data and said negotiation success condition is satisfied.

11. A device according to claim 10 wherein the supplier offer includes constraint data, indicative of a set of required client features, and the client requirement includes feature data, indicative of a set of offered client features, and wherein the control logic is 10 configured:

to compare the constraint data of the client requirement with the feature data of the supplier offer and compare the constraint data of the supplier offer with the feature data of the client requirement; and

- 15 to determine that said match exists if said negotiation success condition is satisfied and the feature data of the supplier offer and client requirement corresponds to the constraint data of the client requirement and supplier offer respectively.

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12. An electronic trading system comprising:
 - a trader device;
 - a supplier device for transmitting a supplier offer to the trader device, the supplier offer comprising feature data, indicative of a set of features of an offered product,
- 5 including at least one updatable feature data element which is indicative of a variable feature of the offered product and includes address data indicative of a location from which a current specification of the variable feature can be obtained by the trader device in response to an update request from the trader device;
- 10 a supplier feature updater, responsive to an update request issued by the trader device to the location indicated by said updatable feature data element of the supplier offer, to supply a current specification for the feature data element to the trader device;
- 15 a client device for transmitting a client requirement to the trader device, the client requirement comprising constraint data, indicative of a set of required product features, and at least one updatable feature data element, indicative of a variable required product feature, which includes address data indicative of a location from which a current specification of the variable feature can be obtained by the trader device in response to an update request from the trader device; and

a client feature updater, responsive to an update request issued by the trader device to the location indicated by said updatable feature data element of the client requirement, to supply a current specification for the feature data element to the trader device;

5 wherein the trader device comprises communication means for transmission and reception of data by the trader device, memory for storing the supplier offer transmitted by the supplier device, and control logic responsive to receipt of the client requirement transmitted by the client device to determine whether a match exists between the client requirement and the supplier offer by:

10 comparing the constraint data and the feature data;

 repeatedly issuing update requests to obtain current specifications for said updatable feature data elements of the supplier offer and the client requirement and determining whether a negotiation success condition, dependent on said current specifications, is satisfied, until said negotiation success condition or a negotiation

15 termination condition is satisfied; and

T E C H N O L O G Y C O M P A N Y

determining that a match exists between the client requirement and the supplier offer if said feature data corresponds to said constraint data and said negotiation success condition is satisfied.

13. A system according to claim 12 wherein the supplier device includes said
5 supplier feature updater.

14. A system according to claim 12 wherein the client device includes said client
feature update means.

15. A computer program product, readable by a processor of a trading device of
an electronic trading system, said product comprising computer program code means
10 executable by the processor to determine whether a match exists between a client
requirement and a supplier offer, wherein the client requirement comprises constraint data,
indicative of a set of required product features, and at least one updatable feature data
element, indicative of a variable required product feature, which includes address data
indicative of a location from which a current specification of the variable feature can be
15 obtained by the trader device in response to an update request from the trader device, and
wherein the supplier offer comprises feature data, indicative of a set of features of an
offered product, including at least one updatable feature data element which is indicative
of a variable feature of the offered product and includes address data indicative of a

location from which a current specification of the variable feature can be obtained by the trader device in response to an update request from the trader device, said computer program code means being executable by the processor to determine whether said match exists by performing the steps of:

5 comparing said constraint data and said feature data;

repeatedly issuing update requests to obtain current specifications for said updatable feature data elements of the supplier offer and the client requirement and determining whether a negotiation success condition, dependent on said current specifications, is satisfied, until said negotiation success condition or a negotiation

10 termination condition is satisfied; and

determining that said match exists between the client requirement and the supplier offer if said feature data corresponds to said constraint data and said negotiation success condition is satisfied.

16. A program storage device readable by machine, tangibly embodying a
15 program of instructions executable by the machine to perform a method for determining, in a trader device of an electronic trading system, whether a match exists between a client requirement, provided by a client device of the system, and a supplier offer stored in said

trader device, the supplier offer comprising feature data, indicative of a set of features of an offered product, including at least one updatable feature data element which is indicative of a variable feature of the offered product and includes address data indicative of a location from which a current specification of the variable feature can be obtained by

- 5 the trader device in response to an update request from the trader device, said method comprising the steps of:

- a) receiving from the client device a client requirement comprising constraint data, indicative of a set of required product features, and at least one updatable feature data element, indicative of a variable required product feature, which includes address data
- 10 indicative of a location from which a current specification of the variable feature can be obtained by the trader device in response to an update request from the trader device;
- b) comparing the constraint data and the feature data;
 - c) repeatedly issuing update requests to obtain current specifications for said updatable feature data elements of the supplier offer and the client requirement and
- 15 determining whether a negotiation success condition, dependent on said current specifications, is satisfied, until said negotiation success condition or a negotiation termination condition is satisfied; and

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d) determining that a match exists between the client requirement and the supplier offer if said feature data corresponds to said constraint data and said negotiation success condition is satisfied.